COMPREHENSIVE INDIVIDUALIZED CURRICULUM AND INSTRUCTIONAL DESIGN (SENNOTT ET AL.)



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Book: Comprehensive Individualized Curriculum and Instructional Design (Sennott et al.)

Samuel Sennott, Sheldon Loman, Kristy Lee Park, Luis F. Pérez, Michael J. Kennedy, John Romig, & Wendy J. Rodgers

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TABLE OF CONTENTS

Licensing

1: Guiding Principles for Developing Comprehensive and Meaningful Instruction for Individuals with Complex Needs

- 1.1: Prelude
- 1.2: Guiding Principle 1: Plan with the Individual and Family
- 1.3: Guiding Principle 2: Promote Self-Determination throughout the Assessment, Intervention, and Monitoring Process
- 1.4: Guiding Principle 3: Examine the Current and Future Inclusive Environments
- 1.5: Guiding Principle 4: Utilize Universal Design for Learning Principles in Developing Modifications and Supports
- 1.6: Guiding Principle 5: Implement Evidence-Based Practices to Individualize Instruction
- 1.7: Guiding Principle 6: Use Data to Make Decisions to Improve Instruction
- 1.8: Conclusion
- 1.9: References

2: Naturalistic AAC Communication Intervention

- 2.1: Prelude
- 2.2: AAC Intervention Resources
- 2.3: AAC modeling Rationale
- 2.4: MODELER Strategy
- 2.5: References

3: Principles of Applied Behavior Analysis

- 3.1: Prelude
- 3.2: Defining Characteristics of Applied Behavior Analysis
- 3.3: Select a Socially Relevant Behavior
- 3.4: Measure the Behavior with a Reliable Data Collection System
- 3.5: Select Evidence-Based Treatment Procedures Based on Behavior Contingencies
- 3.6: Implement Procedures with Fidelity
- 3.7: Evaluate Long-term Effects of Treatment
- 3.8: Procedures
- 3.9: Procedures to Increase Behaviors
- 3.10: Decreasing Unwanted Behavior
- 3.11: Example from the Classroom
- 3.12: Summary
- 3.13: References
- 3.14: Appendix A- Measure Behavior

4: Developing Function-based Interventions

- 4.1: Prelude
- 4.2: Resources for Conducting a Functional Behavioral Assessment (FBA)
- 4.3: ABC's of Function-Based Supports
- 4.4: Using Assessment to Guide Function-Based Supports
- 4.5: Selecting Function-Based Interventions
- 4.6: Critical Features of Function-Based Alternative Behaviors
- 4.7: Teaching the Alternative Behavior, Desired Behavior, and Approximations
- 4.8: Critical Features of Function-Based Prevention Strategies

- 4.9: Critical Features of Function-Based Consequence Strategies
- 4.10: Summary
- 4.11: References

5: iOS 8 Accessibility

- 5.1: Prelude
- 5.2: Zoom
- 5.3: VoiceOver
- 5.4: Speech
- 5.5: Guided Access
- 5.6: AssistiveTouch
- 5.7: Switch Control
- 5.8: QuickType, Dictation, and Third-Party Keyboards
- 5.9: Display Options
- 5.10: Audio Options
- 5.11: Media
- 5.12: Other Options

6: Using Content Acquisition Podcasts (CAPs) to Improve Vocabulary Instruction and Learning for Students with Disabilities and Their Teachers

- 6.1: Prelude
- 6.2: A Panacea for Students' Ills?
- 6.3: Content Acquisition Podcasts
- 6.4: Shaping the Looks and Sounds of CAPs
- 6.5: Empirical Evidence for CAPs
- 6.6: Embedding Evidence-Based Practices within CAPs
- 6.7: CAP Production Steps
- 6.8: Conclusion
- 6.9: References

Index

Glossary

Index

Glossary

Detailed Licensing

Licensing LicensingEdit Update titlecancel

*A detailed breakdown of this resource's licensing can be found in **Back Matter/Detailed Licensing**.*

CHAPTER OVERVIEW

1: Guiding Principles for Developing Comprehensive and Meaningful Instruction for Individuals with Complex Needs

Author: Sheldon Loman, Portland State University

1.1: Prelude
1.2: Guiding Principle 1: Plan with the Individual and Family
1.3: Guiding Principle 2: Promote Self-Determination throughout the Assessment, Intervention, and Monitoring Process
1.4: Guiding Principle 3: Examine the Current and Future Inclusive Environments
1.5: Guiding Principle 4: Utilize Universal Design for Learning Principles in Developing Modifications and Supports
1.6: Guiding Principle 5: Implement Evidence-Based Practices to Individualize Instruction
1.7: Guiding Principle 6: Use Data to Make Decisions to Improve Instruction
1.8: Conclusion
1.9: References

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1.1: Prelude 1.1: PreludeEdit Update titlecancel

Individuals with complex needs require supports from multiple providers across multiple instructional domains. Designing and implementing effective supports for individuals with complex needs requires intentional committed collaboration from all stakeholders. This chapter introduces guiding principles for designing comprehensive instructional supports for individuals with complex needs that should create a conceptual and practical frame for the successive chapters of this text. Each of these guiding principles is a vast topic with multiple associated texts and resources. Therefore, within this chapter, practical resources are provided to help readers develop their repertoire of tools for designing effective and meaningful supports for individuals with complex needs.

Six Guiding Principles for Developing Comprehensive Supports

1. Plan with the individual and family
2. Promote self-determination throughout the assessment, intervention, and monitoring process
3. Examine the current and future inclusive environments
4. Utilize Universal Design for Learning (UDL) principles in developing modifications and supports within inclusive environments
5. Implement evidence-based practices to individualize instruction
6. Use data to make decisions to improve instruction

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1.2: Guiding Principle 1: Plan with the Individual and Family 1.2: Guiding Principle 1: Plan with the Individual and FamilyEdit Update titlecancel

An essential first step to designing and implementing instruction for individuals with disabilities (IWD) is to plan with the individual and their family. Person-centered planning is a process used with IWD and others that is key to implementing supports for the individual (e.g., social workers, speech and language therapists, special educators). The purpose of person-centered planning is to establish positive, collaborative, meaningful, and individualized programs for IWD (Claes, Van Hove, Vandevelvelde, Loon, & Schalock, 2010). There are several person-centered planning models such as Planning Alternative Tomorrows with Hope (PATH; Pearpoint, O'Brien, & Forest, 1993), Personal Futures Planning (O'Brien & Lovett, 1992), McGill Action Planning (Vandercook, York, & Forest, 1989), and the Picture Method (Holburn, Gordon, & Vietze, 2007). All of these models are designed to center the supports and services for IWD with the individual and their families.

Choosing Outcomes and Accommodations for Children (COACH, Giangreco et al., 2011) is a comprehensive, yet practical approach to collaborative instructional planning for IWD who require intensive supports. The COACH process is designed to focus on promoting achievement for IWD within inclusive settings. There are two parts of COACH: Part A guides families and educators to determine a student's educational program; and Part B guides the team to translate the family-identified priorities into goals and objectives. Part A involves a family interview that helps IWD and their families identify valued life outcomes and prioritize learning outcomes within selected curriculum areas. Part A concludes with the student team identifying general supports that will improve access and participation in the student's educational program. These general supports outline accommodations, modifications, and individuals essential to implementing a successful inclusive program for a student. Part B of COACH then guides the team to translate these supports into measurable annual goals and shortterm objectives. Finally, the team delineates a "Program-at-a-glance" that is shared with everyone who supports the student.

A resource for assisting IWD plan their supports and services is the website www.imdetermined.org. The "One-Pager" from this resource is a practical tool that can be used by students and their teams to share strengths, preferences, interests, and needs with new teachers, employers, case managers, and other people who may support the students. A template is provided that allows students to type or handwrite and embed pictures within this one-page document. Examples are provided on this website for how this tool can be used. Overall, the "One-Pager" is a tool that can be used with students to ensure that they are the center of their instructional programming.

Person-centered planning outlines life-long dreams for the individual and plans to help them achieve them. The process brings together the individual, their family, and support-service providers (e.g., special and general educators, social workers, community support providers) to collaborate in designing a cohesive instructional program that addresses the individuals' values. This person-centered team (sometimes called an instructional team) will follow a student along in their program, its members consistently updating one another to improve the outcomes for the individual and their family.

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1.3: Guiding Principle 2: Promote Self-Determination throughout the Assessment, Intervention, and Monitoring Process 1.3: Guiding Principle 2: Promote Self-Determination throughout the Assessment, Intervention, and Monitoring ProcessEdit Update titlecancel

When implementing programs for IWD it is important to seek their perspective on the types and levels of supports they need. However, often times IWD struggle to express their preferences and are not provided with opportunities to engage in activities to promote their self-determination. For educators of IWD, promotion of self-determination is foundational throughout the assessment, intervention, and monitoring process.

Promoting self-determination has become best practice in the education of IWD. Self-determination is a broad construct in which no single practice or package of practices applies. Based on work from Wehmeyer et al. (2011) and Walker et al. (2011), self-determination comprises three dimensions in which an individual needs to develop: (a) causal agency (an individual's control of events), (b) proxy agency (provision of supports and assistance allowing the individual to control events), and (c) opportunities to act upon the environment. These dimensions and specific skills are displayed in Figure 1.3.1 below.

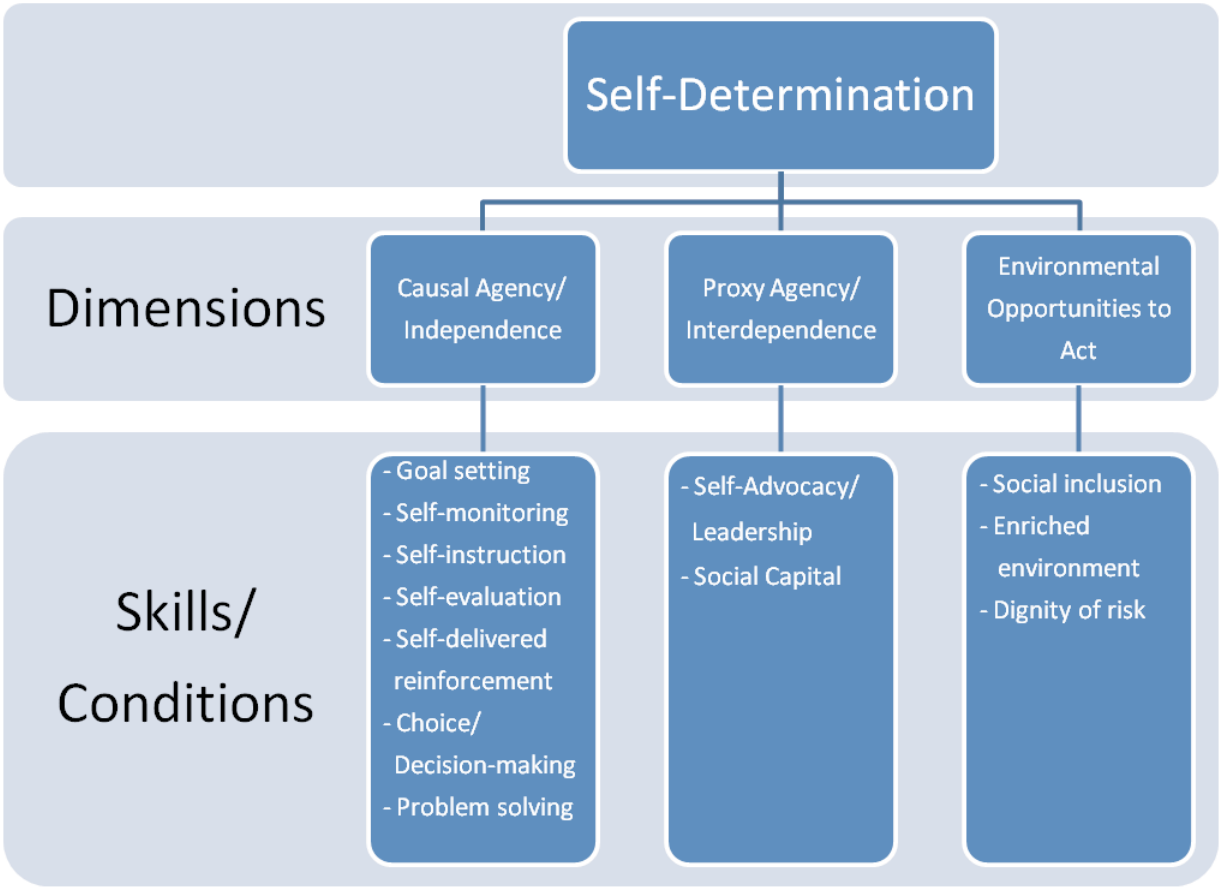


Figure 1.3.1: Framework of Self-determination Dimensions and Skills/Conditions
(from Loman et al., 2010)

Preference Assessments

During the assessment process, self-determination can be promoted through the use of preference assessments. Preference assessments include the student in identifying reinforcers as well as identifying meaningful activities and materials. Interviews of significant others regarding a student's preferences are a good starting point. However, it is important to include the individual student in his or her own preference assessment. The use of direct observations of students interacting with different activities and materials is the most reliable way to obtain this information.

Several helpful resources for promoting self-determination are available through the Zarrow Center for Learning Enrichment at the University of Oklahoma (http://www.ou.edu/education/centers-and-partnerships/zarrow.html). The center provides preference-indicator tools for individuals of all ages:

- Child Preference indicators (www.ouhsc.edu/thecenter/products/documents/ChildPreferenceIndicators_rev1107.pdf),
- Personal Preference indicators (www.ouhsc.edu/thecenter/products/documents/CLLUCEDD_Personal_Preference_Indicators_June%202006.pdf), and
- Employment Support indicators (www.ouhsc.edu/thecenter/products/documents/EmploymentSupportIndicators.pdf).

These tools can assist IWD in identifying preferences and promoting their self-determination.

A systematic preference assessment involves the direct observation of an individual with different stimuli and observing their interactions with the materials or activities. Common methods for this are free-access preference assessments and forced-choice preference assessments. In a free-access preference assessment (shown below in Table 1.3.1), the assessor makes multiple materials or activities that may be preferred by the student readily available. The student's interactions with the materials or activities are recorded to identify the most preferred items. See a sample template below:

Table 1.3.1: Free-Access Preference Assessment Template

Student:	Date Range of Sessions:					
Complete the table below noting how long the student engages with the materials/activities during the session.						
Date:	Item 1:	Item 2:	Item 3:	Item 4:	Item 5:	Item 6:
Total Time Engaged:						

A forced-choice preference assessment involves selecting a specific number of materials or activities and presenting them in pairs in a random fashion. At the conclusion of a forced-choice preference assessment, a hierarchy of preferred materials or activities is determined. An example of a forced-choice template is available at: http://r4strategiesasd.wikispaces.com/file/view/Forced+Choice+Reinf+Assessment.pdf

Self-determination practices

Five practices identified as having evidence for promoting self-determination for IWD (Loman, Vatland, Strickland-Cohen, Horner, & Walker, 2010; Vatland et al., 2011) were: (a) use person-centered planning methods; (b) use teacher-directed instructional strategies; (c) teach students skills needed to self-direct learning; (d) create and maintain a system that involves family supports and family involvement; and (e) organize environments to provide enriched opportunities, supports, models, and resources. In their practice guide, Loman et al. (2010) provide a definition of the practice, level of evidence and social validity, a brief summary of support for the practice, instructions for how to implement the practice, and identified barriers or limitations of the practice.

The promotion of self-determination is critical to the development of an effective and meaningful program for IWD. The practices and procedures presented within this chapter and the remainder of this text should be framed with promoting self-determination in mind.

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1.4: Guiding Principle 3: Examine the Current and Future Inclusive Environments
1.4: Guiding Principle 3: Examine the Current and Future Inclusive EnvironmentsEdit Update titlecancel

Mapping Objectives to Activities in Inclusive Environments

After planning with the individual and understanding their preferences, the next step to designing an effective inclusive instructional program is to examine the instructional environments. When examining the current and future environments, identify their current goals and objectives within the context of an age-appropriate inclusive instructional setting. A common tool used for this is the Infused Skills Grid (Peak Center Inc., 1999; http://www.cde.state.co.us/cdesped/accommodationsmanual_infusedskillsgrid). The Infused Skills Grid should be completed by inserting the student's current objectives in the horizontal rows. Then, complete the schedule of a typical student's day (it is important that this schedule be based on a same-age peer without a disability). Using the tool, the student's instructional team will identify when the objectives can be met within the typical instructional settings. Usually all objectives can be addressed within at least 90% of the typical schedule. A facilitator of this process, usually a special educator, can help the team think of ways the objectives can be met within inclusive environments. If an objective cannot be met within the inclusive environments, the facilitator should ask the team if the objectives should be revised to be more appropriate for a student within this setting.

Identifying Strengths and Barriers within Inclusive Settings

A daily schedule analysis (sometimes referred to as an ecological inventory; Table 1.4.1) is used to analyze the schedule and instructional environments within typical settings. Similar to the Infused Skills Grid, the first step in completing this tool is to outline the classes and environments the student would attend if he or she did not have a disability. Following the columns in the daily schedule analysis tool, specify for this class/environment: (a) the activities that all students engage in; (b) natural supports that already exist for all students; (c) target skills that the focus student needs to develop in order to participate in these activities; and (d) recommended accommodations and modifications to promote participation for the focus student. A video example of a completed daily schedule analysis with an explanation is provided in the following link: my.brainshark.com/Daily-Schedule-Analysis-Simulation-1-39562592

Breaking Down Tasks within Inclusive Environments

The daily schedule analysis provides a broad picture of instructional targets and modifications needed for an individual student. To break down specific target skills needed to be successful in inclusive environments, a task analysis should be conducted. A task analysis involves breaking down the steps of a routine or task. These individual steps are then analyzed for variations in cues and prompts to determine how to provide instruction that promotes generalization of the skills.

An example of a completed task-analysis form is provided below (Figure 1.4.1). Using this task-analysis form, identify a logical step sequence for completing the routine. Make sure to provide brief, but specific information in the step to prompt the learner. For example, instead of "student will turn the door knob to the right" state "turn the door knob." Using this consistent language will help those implementing the plan identify verbal prompts to use with a student and help the student identify the relevant features to cue their behavior. Next, identification of stimuli that could be varied for each step should be notated in the adjacent column. Finally, data codes from 0 (no opportunity) to 1 (most intrusive level of prompting; e.g., physical prompting) to 2 (less-intrusive level of prompting; e.g., gestural prompting) to 3 (least intrusive level of prompting; e.g., verbal prompting) to 4 (independent) are used to empirically document student progress. A second sheet (Table 1.4.2) is provided to allow for anecdotal and qualitative data collection of student and teacher performance within the task. For more information and examples of task analyses, go to the National Professional Development Center on Autism Spectrum Disorders: autismpdc.fpg.unc.edu/content/task-analysis.

Table 1.4.1: Daily Schedule Analysis Template

Domain	School	Activities (All students experience)	Natural Supports (Supports available for all students)	Target Skills (For target student during this subject; highlight priority skills)	Possible Adaptations/Modificati cati ons (Consider Assistive Technology, Augmentative Communication)

Environments	Grade level:				
Sub-environments →	Subject 1 (e.g., homeroom, language arts)				
	Subject 2				
	Subject 3				
	Hallway				
	Bathroom				
	Cafeteria				
	Other				

Task Analysis Data Tracking System for a Functional Routine

Student: _____ Routine: ___Hair Brushing_____ Setting(s):__Bathroom, Locker room_

Days of Week/Time of Day: _____Data Collection Date Range: _____ to _____

		Baseline			Intervention								
Step	Features to vary (to promote generalization) Note features included for each step	12/5	12/6	12/7	12/9	12/10	12/11	12/12	12/13	12/16	12/17	12/18	% Indep end.
11. Final Step: Put Brush Away	A. Location B. Brush Type C. Time of day	4	4	4	4	4	4	4	4	4	4	4	100%
10. Check Hair for Neatness	A.	2	2	2	4	4	4	4	4	4	4	4	73%
9. Brush Left Back of Head	A., B., C. D. Staff supporting	1	1	1	3	4	4	3	3	4	4	4	64%
8. Brush Left Side of Head	A, B, C, D	1	1	1	3	3	3	3	3	3	3	4	9%
7. Brush Front	A, B, C, D	1	1	1	3	3	3	3	3	3	3	4	9%
6. Brush Right Side of Head	A, B, C, D	1	1	1	3	3	3	3	3	3	4	4	18%
5. Brush Right Back of Head	A, B, C, D	1	1	1	3	3	3	3	4	4	4	4	36%
4. Pick up brush	A, B, C, D	2	2	2	3	3	3	4	4	4	4	4	45%
3. Select Desired Materials	A, B, C, D	2	2	2	3	3	3	4	4	4	4	4	45%
2. Locate Brushing materials	A, B, C, D	2	2	2	3	3	3	3	4	4	4	4	36%
1. **Initial Step:** Initiate Brushing	A, B, C, D	2	2	2	3	4	4	4	4	4	4	4	63%
Staff/Observer Initials		SL	SL	SL	SL	SL	SL	SL	SL	SL	SL	SL	
Total Completion Time (in Minutes):		5	6	5	5	4	4	4	3	3	2	2	
Total Steps Independent - Data Code: 4 (Circle & graph)		1	1	2	2	4	4	5	7	8	9	11	
Total Steps – Verbal & Gesture Data Code: 3		0	0	9	9	7	7	6	4	3	2	0	
Total Steps Partial Physical Data Code: 2		5	5	0	0	0	0	0	0	0	0	0	
Total Steps Fully Physical - Data Code: 1		5	4	0	0	0	0	0	0	0	0	0	
Total Steps w/ No opportunity- Data Code: 0		0	0	0	0	0	0	0	0	0	0	0	

Qualitative Data Collection (On Back)

Figure 1.4.1: Task Analysis Tracking Form.

Table 1.4.2: Qualitative Data Collection Form to Accompany the Task Analysis Form

Qualitative Data Collection

	Focus Student Performance	Variables (Planned or unplanned) influencing student performance	Considerations for prompting, supports or adjustments	Instructor practices
Date: Baseline #1				
Date: Baseline #2				
Date: Baseline #3				
Date: Intervention				
Date: Intervention				
Date: Intervention				
Date: Intervention				
Date: Intervention				

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1.5: Guiding Principle 4: Utilize Universal Design for Learning Principles in Developing Modifications and Supports 1.5: Guiding Principle 4: Utilize Universal Design for Learning Principles in Developing Modifications and SupportsEdit Update titlecancel

Planning instruction for IWD requires collaboration between general and special educators (e.g., special education, speech and language therapist, occupational therapist). This team of educators should be guided by the information compiled from the person-centered planning process, student preference assessments, and assessment of the instructional environments. All of this information will be utilized to embed a student's individualized instruction within the instruction of the Common Core State Standards and College Career Readiness Standards within the general education settings.

The principles of Universal Design for Learning (UDL; CAST, 2011) create a framework for collaborative creation of curricula that involves both general and special educators. A short You-Tube video presenting UDL from the Center for Applied Special Technology demonstrates this framework (CAST; https://www.youtube.com/watch?v=bDvKnY0g6e4). The primary UDL principles for providing individuals with multiple means of representation, expression, and engagement lay a foundation for designing Common Core units and lessons that promote the participation of all learners.

Developing a unit plan for Common Core content areas that address IWD in general-education classrooms takes a coordinated effort from the instructional team. Falco (2014; modified from Tamarkin, n.d.) created a unit/lesson redesign worksheet (Table 1.5.1) that can be used by instructional teams to ensure they are incorporating UDL into their lessons. Within this worksheet, the team outlines the Common Core state standards and lesson objectives that are being addressed. Then, the team outlines how students will demonstrate their learning and what they currently do to teach these skills. In the adjacent columns of the worksheet, instructional teams can then identify ways they may augment their instruction to ensure that the principles of UDL are incorporated in their lessons. View this video clip to see how a biology teacher has utilized UDL within their instruction: https://www.youtube.com/watch?v=G18AzLXhEdA&feature=relmfu

Table 1.5.1: Unit/Lesson Re-Design Worksheet. Falco, 2014 (Adapted from Tamarkin, D. (n.d.).)

Unit/Lesson Re-Design Worksheet (Example)

Course/Lesson __Biology 1__ **Instructor/s** __Dawn__ **Date** __Nov. 6, 2014__

Key Goals/Outcomes (Usually tied to CCSS)	**What I Want Students to Do to Demonstrate Learning**	**What I Do Now**	**Applying UDL: Representation of Content**	**Applying UDL: Student Actions/Expression**	**Applying UDL: Student Engagement/Motivation**
Recognize the components of a cell	Show the components of a cell	Give students opportunities to look at cells through a microscope and draw cell and its parts	Provide manipulatives to represent cell parts	Students use manipulatives to show cell parts and use tabletop models to assist in drawing	Students enjoy manipulating the models; More success in drawing
Study content following class Use lab equipment accurately & safely	Take notes & review notes to learn parts of cell & their functions Use the microscope	Lecture & draw cell models; Expect students to review their own notes Expect students to use microscope alone or with one partner and to help their partners; spend more time with students with special needs	Use interactive white board to demonstrate drawing & provide good notes	Use teacher's notes from interactive white board & review own & other students' notes posted online All students in groups of three and all students help their partners	Students have accurate notes and drawings to review Students share responsibility for helping partners

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1.6: Guiding Principle 5: Implement Evidence-Based Practices to Individualize Instruction 1.6: Guiding Principle 5: Implement Evidence-Based Practices to Individualize InstructionEdit Update titlecancel

Implementation of effective instructional practices is the critical step that brings all of the guiding principles together. In 2014, the National Professional Development Center on Autism Spectrum Disorders (NPDC) has updated their autism intervention literature review on evidence-based practices for children, youth, and young adults with Autism Spectrum Disorders (ASD). In their review they identified 27 practices that were considered “evidence-based.” The document in its entirety is provided here: http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/2014-EBP-Report.pdf

The NPDC has also developed evidence-based practice (EBP) briefs for 24 of the identified EBPs available here: autismpdc.fpg.unc.edu/content/briefs. These briefs provide a description of each of the practices, the evidence supporting the use of the practices, and step-by-step instructions for implementing those practices. Additionally, the NPDC and the Ohio Center for Autism and Low Incidence (OCALI) have developed online modules for understanding each of these EBPs. Click on the following link and register for a free account to access this resource: http://www.autisminternetmodules.org/

Ensuring that EBPs are embedded in inclusive environments is a challenge for all educators. Scheduling and collaboration with the instructional team using the tools already presented in this chapter will assist with this process. To further assist in the process, Loman (2014) has framed a number of the EBPs within the UDL framework (Table 1.6.1). This graphic may be helpful for instructional teams to determine how to best support IWD in the Common Core content areas.

Table 1.6.1: Evidence-based Practices for Individuals with Autism by Universal Design for Learning Principle

Representation	Expression	Engagement
Visual Strategies (Picture Symbols/Schedules)	Augmentative Communication	Social Narratives/Power Cards
Video Modeling	Functional Communication Training	Reinforcement
Modeling/Prompting	Time Delay	Peer-mediated intervention
Naturalistic Interventions	Discrete Trial Training	Self-management
Task Analysis-Chaining	Pivotal Response Training	Naturalistic Interventions
Structured Work Systems/Activities	Response Interruption	

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1.7: Guiding Principle 6: Use Data to Make Decisions to Improve Instruction 1.7: Guiding Principle 6: Use Data to Make Decisions to Improve InstructionEdit Update titlecancel

Every step of the process in designing and implementing a comprehensive instructional program for IWD relies on the use of data. A number of tools presented throughout this chapter may be used as sources of data to outline effective supports for IWD. The COACH process (Giangreco, Cloninger, & Iverson, 2011) provides valuable information that brings together information from individuals, their families, and school professionals. These data are used to outline general supports and annual goals and objectives for students. Preference assessments are another good source of data for better understanding the learner and how to engage them throughout the learning process. Additionally, the use of the daily schedule analysis and task analyses are critical to guiding meaningful and effective instruction. Furthermore, data from individualized plans of support such as behavior-support plans or curriculum-based measures within the classroom will provide essential information to monitor the progress of IWD.

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1.8: Conclusion 1.8: ConclusionEdit Update titlecancel

The six guiding principles presented in this chapter frame the process of supporting IWD in inclusive settings. Led in partnership with the individual and their family (ideally the student should lead this meeting), instructional teams of individuals with complex support needs should consistently review data at least quarterly to ensure all stakeholders are synergistically heading in a positive direction. Data from Individualized Education Program (IEP) goals should be discussed as well as how the student is engaging in the general-education curriculum. These team meetings should always be guided by an agenda that presents current data and seeks to remove barriers to success for the student. In order for these meetings to be effective, team members should consistently assume the following roles: Recorder (types and distributes meeting minutes), Data Analyst (compiles and presents data of student progress), Time Keeper (ensures topics are addressed in a timely fashion), and Facilitator (keeps the meeting running; ideally the student). An individual student meeting agenda template is provided below (Figure 1.8.1).

Individual Student Meeting Agenda Template

Student: _____ **Recorder:**_____

Data Analyst: _____ **Time Keeper:** _____

Facilitator (if not the student): _____

Date: ___/___/____

Team Members Present: _____

I. Review agenda, determine whether changes are needed (2 minutes)

II. Review task list from previous meeting, document status of tasks (10 minutes)

Who	What	When	Status
			Not In Done Not started progress Needed
			Not In Done Not started progress Needed
			Not In Done Not started progress Needed
			Not In Done Not started progress Needed

III. Progress summary: Presentation of Current Data (15 minutes)

a. Goals being met. Celebration!

b. Goals not being met or not yet addressed

1. Determine problem and next steps

-Possible problems: fidelity, intervention needs to be modified, additional supports or technology are required

-Possible decisions: Meet with teachers, change intervention, acquire technology or supports, conduct assessment

Problem	Decision	By Whom & byWhen?

IV. Upcoming Activities/ Changes (15 minutes)

Upcoming Activity	*Concerns*	*Decisions*	*By Whom & When?*

Next Meeting Date: _____

Figure 1.8.1: Individual Student Meeting Template. Ideally to be led by the student at least quarterly.

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